



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

LOPHOLEJEUNEA MUELLERIANA IN FLORIDA.

ALEXANDER W. EVANS.

Several months ago Mr. Severin Rapp, of Sanford, Florida, had the kindness to send me a package of Hepaticae for determination, all collected in the vicinity of his home. Among them were two specimens of a *Lopholejeunea* (3 and 14), which should apparently be referred to *L. Muelleriana* (Gottsche) Schiffn., a species new to the United States. *L. Muelleriana* was originally described from material collected in Mexico and is now also known from several of the West Indian Islands and from South America, so that the extension of its range into Florida is by no means surprising. Both of Mr. Rapp's specimens grew on the bark of trees.

So far as their vegetative organs are concerned the plants from Florida agree closely with the specimens from Porto Rico which I have recently described and figured.¹ The perianth, however, shows a greater development of paraphyllia or laciniae on the surface and indicates that this organ exhibits an even wider range of variability than had been supposed. In my description of the perianth the surface (leaving out of consideration the laciniae along the four sharp keels) is said to be smooth except for the occasional presence of a few scattered paraphyllia on the postical aspect, the implication being that such paraphyllia are frequently absent altogether. In the specimens from Sanford the paraphyllia are apparently always present and occur on both surfaces. Those on the antical surface tend to be arranged in a median longitudinal row, perhaps marking the position of a rudimentary antical keel. Those on the postical surface show a similar tendency to be arranged in three longitudinal rows, one lying between the two angles of the postical keel and the two others in the strongly flattened portions of the perianth between the postical and lateral keels. On some perianths one or two of these rows may be very indistinct or absent altogether, and there are often a few scattered paraphyllia on each surface in addition to those in rows. The presence of antical paraphyllia had not been suspected from the study of Porto Rican specimens of *L. Muelleriana*, and I find upon examining them again that the antical surface of the perianth is perfectly smooth in the majority of cases. Occasionally, however, one or two paraphyllia may be detected in this position. In the Brazilian specimens distributed by Spruce the paraphyllia are better developed and sometimes form as distinct an antical row as in the specimens from Florida. In accordance with these new observations the description of the surface of the perianth should be emended as follows: antical surface sometimes bearing an interrupted median row of paraphyllia similar to the laciniae of the keels; postical surface sometimes bearing from one to three similar rows of paraphyllia; both surfaces otherwise smooth except for the occasional presence of a few scattered paraphyllia. In the Sanford specimens the lobules of the perichaetial bracts are distinct and usually acute or apiculate at the apex, a condition which is only occasionally to be observed in material from tropical America.

¹ Bull. Torrey Club 34: 27. pl. 4, f. 1-8. 1907.

Lopholejeunea Muelleriana is the twenty-ninth species of the Lejeuneae to be recorded for the United States and the twenty-fourth for Florida. With regard to this particular group of Hepaticae Florida stands far in advance of the other states of the Union, Louisiana coming second with only nine species. This condition is of course to be explained by the subtropical climate of Florida and its close proximity to the West Indies, where the Lejeuneae reach a high degree of development. Of the twenty-four species so far recorded three are apparently endemic and nine are tropical American species which have not yet been detected in the United States beyond the limits of Florida. The remaining twelve species are mostly of wide distribution.

Yale University.

HELPFUL HEPATIC LITERATURE.

Attention has been called to an omission from Miss Haynes' "Helpful Literature for Students of North American Hepaticae," Bry. Vol. XI, No. 2, p. 32, namely "Keys to the Liverworts recognized in the 6th Ed. of Gray's Manual of Botany," by Edo Claassen. Published in The Ohio Naturalist. Vol. V, No. 6; Vol. VI, No. 6 (a correction of the former); Vol. VI, No. 7, and Vol. VII, No. 1 (a correction of No. 7). For these keys address the author, Mr. Edo Claassen, 18 Fernwood avenue, East Cleveland, Ohio.

It is only just to Miss Haynes, however, to state that her list was not intended to be exhaustive, only giving as she states books and pamphlets she has most frequently used. Any other titles that correspondents have found useful will be gladly added if sent to the Editor.

NOTES ON JUBULA PENNSYLVANICA.

ANNIE LORENZ.

In Rhodora, Vol. 7, March, 1905, Dr. Evans describes our eastern American form of *Jubula* as a separate species, namely, *J. Pennsylvanica* (St.) Evans.

Underwood, in Manual 6, ed. 1890, p. 706, describes this form as *var. Sullivantii* Spruce, but the figure given is typical European *J. Hutchinsiae*.

As there is no plate of *J. Pennsylvanica* as yet, one is presented herewith.

The bracts of *J. Pennsylvanica* are described as acuminate and entire, but some of the more robust bracts and bracteoles show a tooth on one side of each lobe. The antheridial spikes resemble those of *Frullania Eboracensis*, but larger. Bracts complicate-bilobed, the lobes unequal, ovate, more or less acute, and enclosing two antheridia each.

This species is reported from most of the New England states; evincing a preference for those rocks containing potassic compounds.

Hartford, Conn.